

Coin task with Practice Standards in mind....



- I have 5 coins in my pocket. The coins may only be pennies, nickels, dimes, or quarters. If I reach into my pocket and pull out 2 coins, how much money might I have in my hand?
 - What is the smallest amount I might have in my hand?
 - What is the largest amount?
 - How can you prove that you have all possible answers?
- Adapted from the NCTM (1989) *Curriculum and evaluation standards*.



Task #2 Connecting Standards for Content and Practice in a Problem-based Classroom

Examine the 3 DVD rental plans below.

Movie Buster
\$3 per movie rented

Online Flix
\$12 per month plus
\$1 per movie rented

Mail Flix
\$18 per month regardless of the number of movies rented



Do the three plans ever cost the same for renting the same number of DVDs?

Briars, Oct. 2011



Individually do the task, then work with a partner to compare your work. Justify your answers. How did your partner solve it? How was their thinking the same or different from your thinking?

Looking at Student Work

Movies

| | | | | | | | |
|-----------------|-----|-----|-----|------|------|------|------|
| Movie Buster | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | \$3 | \$6 | \$9 | \$12 | \$15 | \$18 | \$21 |

Money

| | | | | | | | |
|----------------|------|------|------|------|------|------|------|
| Online Flix | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | \$13 | \$14 | \$15 | \$16 | \$17 | \$18 | \$19 |

| | | | | | | | |
|--------------|------|------|------|------|------|-------|-------|
| Mail Flix | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | \$18 | \$36 | \$54 | \$72 | \$90 | \$108 | \$126 |

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Looking at Student Work: The Partner's response

Movies

| | | | | | | | |
|-----------------|-----|-----|-----|------|------|------|------|
| Movie Buster | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | \$3 | \$6 | \$9 | \$12 | \$15 | \$18 | \$21 |

Money

| | | | | | | | |
|----------------|------|------|------|------|------|------|------|
| Online Flix | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | \$13 | \$14 | \$15 | \$16 | \$17 | \$18 | \$19 |

| | | | | | | | |
|--------------|------|------|------|------|------|------|------|
| Mail Flix | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | \$18 | \$18 | \$18 | \$18 | \$18 | \$18 | \$18 |

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